Screencast: 09-filesystem-hierarchy.webm or 09-filesystem-hierarchy.mp4

References:

Ualsah Reference - Chapter 6 - The Filesystem TLCL - Chapter 3, Guided Tour

Unix tries to make everything a file:

Processes are a file (/proc/###)
Devices are a file (/dev/sda1)

A description and comparison to where Microsoft Windows stores things and where Mac OS X stores things may be helpful.

Linux filesystem hierarchy (UaLSAH pg 145 - 147 also man hier)

/bin

Most rudimentary binaries

/boot

Kernel, driver disk images, bootloader config

/dev

character, block, major / minor

/etc

Global config files

/home

Users' directories - dot files and dot folders for configs

/lib

Most rudimentary libraries and firmware

/lost+found

Where damaged files go after fsck

/media

Where removable media is often automounted

/mnt

Like media

/opt

Optional third-party software

/proc

A glimpse inside the brain of the kernel

/root

The root user's home directory

/sbin

Most rudimentary super user binaries

/sys

Augments /proc

/tmp

World writable, temporary storage

/usr

Large hierarchy - bin, include, lib, local, sbin, share, src Mostly static content

/var

Large hierarchy - lib, lib/mysql, local, lock, log, run, spool, www Mostly variable content

References:

http://tldp.org/LDP/Linux-Filesystem-Hierarchy/html/

http://en.wikipedia.org/wiki/Unix directory structure

http://fedoraproject.org/wiki/Features/UsrMove (adopted by many distros)

Interesting files in letc

fstab - Defines default mount points (man fstab)

inittab - Defines default runlevel

passwd, group, shadow, gshadow (covered in User Accounts lecture)

systemd/ - systemd related configs

profile, bashrc - Defines the environment by setting env variables

bash completion.d/ - Additional tab completion for bash-completion package

resolv.conf - Specifies the DNS servers (man resolv.conf)

services - Shows port defs (man services)

hosts - Local DNS type defs (man hosts)

nsswitch.conf - Lookup order of DNS and other things (man 5 nsswitch.conf)

hostname (hostname-ctl set-hostname kvm-dowdle.localdomain)

Individual user settings are in "dot directories and dot files" inside each user's home directory. To see files that begin with a dot, you have to use the -a flag with Is to see all files. If using a GUI file manager, look for a reference to "hidden" or show hidden.